

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### Chem-Fab Corp.

#### Arkansas Manufacturing Solutions

#### Chem-Fab Adds Five Six Sigma Black Belts To Its Staff

##### Client Profile:

Chem-Fab, Inc., founded in 1966, has developed over time into a totally diversified sub-contractor to the aerospace industry, including aircraft and helicopter companies, international sub-contractors, and the U.S. armed services. Chem-Fab employs 480 people at its facility in Hot Springs, Arkansas.

##### Situation:

In the last few years, Chem-Fab has been implementing lean manufacturing principles throughout its processes and operations. In September 2002, Chem-Fab learned about the Six Sigma Black Belt training program that the Arkansas Manufacturing Extension Network (the Network), a NIST MEP network affiliate, was offering in partnership with the American Society for Quality (ASQ). While Chem-Fab understood the value of having Six Sigma Black Belts on staff, the cost of training a cadre of Black Belts was not a part of its budget. At the time, the cost of the ASQ/Network Black Belt program was \$14,000 per person. With the training costs plus the travel expenses, Chem-Fab was looking at an expenditure of approximately \$20,000 per Black Belt. The Network met with Chem-Fab executives to formulate a strategy that would offer Six Sigma training to at least five company employees.

##### Solution:

The Network presented two options that would prove to be instrumental in solving this dilemma. The first part of the Network's plan was to set-up a class in Chem-Fab's hometown of Hot Springs, Arkansas, thus eliminating approximately \$6,000 per person in expenses.

The second part of the plan was to apply for a state grant to assist with the direct training cost. The Arkansas Workforce Investment Board (WIB) had just issued a request for proposals from Arkansas organizations to use \$1.6 million of incumbent workforce training grant funding. The Network assisted Chem-Fab in completing the grant application for Six Sigma Black Belt training.

In December 2002, Chem-Fab learned that its WIB application had been approved. In the meantime, the Network encouraged other Arkansas manufacturers to apply for the WIB grant for Six Sigma Black Belt training. Eventually, five companies, including Chem-Fab, received the grant to cover 70 percent of the class fee. The Network set-up a training class, which began on January 20, 2003 in Hot Springs. Additional participants came from Preformed Line Products

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in Rogers, Colson Castor in Jonesboro, Polymer Group, Inc. in North Little Rock, and Hoffinger Industries in West Helena.

As part of the four-week Black Belt training, each of the five Chem-Fab Black Belt candidates selected a process improvement and cost saving project within the company. To date, the trainees have organized a 75 percent reduction in order processing time at Chem-Fab. Other ongoing Six Sigma Black Belt projects include improvements in the order entry, engineering, anodize, heat treat, and hand routing operations.

### **Results:**

Applied for and obtained an Arkansas Workforce Investment Board grant to off-set training costs.

Trained 5 employees as Six Sigma Black Belts.

Reduced order processing times by 75 percent.

Improving order entry, engineering, anodize, heat treat, and hand routing operations through training projects.

### **Testimonial:**

"The Six Sigma Continuous Improvement teams will focus on analytical approaches utilizing defect statistics to lead us to priorities. This will allow Chem-Fab to focus on keys to success by acting on the right objectives faster and better than our competition, reducing our defects and improving our cycle time."

Cliff Wright, Director of Lean Manufacturing